

Amendments to the Claims:

This listing of claims will replace all prior listings of claims in the application:

Listing of Claims:

1. (currently amended) A transgenic knockout mouse whose genome comprises a disruption in each allele of the mouse's endogenous melanopsin gene, wherein the disruption in each allele prevents the expression of a functional melanopsin protein in cells of the mouse and the mouse exhibits an attenuated circadian rhythm phase-shift in response to a light pulse during a dark portion of an environmental dark/light cycle.

2. (cancelled)

3. (cancelled)

4. (currently amended) A cell isolated from the transgenic knockout mouse of claim 1, ~~wherein the genome of the cell comprises a disruption in its endogenous melanopsin gene, and wherein the homozygous disruption in each allele prevents the expression of a functional melanopsin protein in said cell.~~

5. (currently amended) A method for identifying a therapeutic agent for modulating circadian rhythm in a mammal, the method comprising:

administering an agent to a transgenic knockout ~~animal~~ mouse of claim 1 ~~whose genome comprises a disruption in its endogenous melanopsin gene, wherein the disruption prevents the expression of a functional melanopsin protein in cells of the animal and the animal comprises a homozygous disruption of the melanopsin gene; and~~

selecting an agent that modulates the circadian rhythm phase-shift response of the mouse to a light pulse during a dark portion of an environmental dark/light cycle ~~regulation of circadian rhythm in the animal.~~

6. (cancelled)

7. (original) The method of claim 5, wherein the selecting step comprises selecting an agent that enhances the circadian rhythm phase-shift response to a light pulse during a dark portion of an environmental dark/light cycle.

8.-21. (cancelled)